

Mariner 6

May 1, 1961

MEMO TO FILE

Call to Jerry Stewart at JPL (tried to get George Hobby as well, but he was out).

JPL would like to keep the mechanical aspects of the multivators an in-house project and we will go ahead on this as a collaborative experiment. I briefed him on the current status of phosphatase assay in particular the very promising numbers that Elliot Packer has been getting where he can readily characterize the phosphatase from one ml of soil. We discussed briefly an AC/DC system for getting two wavelength measurements and this can be kicked around further. Fluorescent measurements are also in the picture for they are on.

He will think a little more about the possible use of a windmill arrangement, in place of the parachute, to furnish power as well as breaking during the atmospheric descent. He thinks the problem of providing for the lubrication may be a difficult one.

We also discussed several schemes of video photography which would depend on the capacity to store rather more pictures in the capsule than are actually sent to the bus. However, the stringent weight limitations now make it unlikely that there will be any storage at all. The two storage schemes I had in mind were 1) for the selection of fields on the basis of maximum detail that is high frequency components and two tracking of moving objects, particularly after the landing. However, if the Mariner program is expanded there may again be room for these refinements as well as for some of the other things that are missing, e.g., an independent check on the altitude.

JPL has put one microscope photograph back into the proposal since this can be done by having a single lens as an alternative objective in the photographic system. This would just look at whatever it fell on.